

Approved Materials - Water

Manufacture Size	- Model No Comments
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1.3 *Pavement Replacement*

Asphalt and concrete

Type 301 asphalt

-
base course

Type 402 asphalt

-
intermediate course

Type 404 asphalt

-
top course

Type 451 concrete

-
reinforced

2.01 *PIPE AND FITTINGS*

Pipe Couplings (dissimilar pipe applications) stainless bolts required

Full Circle Repair Clamp

Smith - Blair	- 226,227,238,239
2"-14", 2"-8" nom. Size	3/4", 1" Threaded Outlet Single or Double Band

Pipe Repair Couplings

Romac	- 501, XR501
2"-24" 501, 4"-12" XR501	Flanges Color Coded, Red=I.P.S, Black=C.I, Yellow=A.C
Romac	- RC-501, EC-501
4"x3", 6", 8"x6", 10", 4"x16"	Color Coded Range
Dresser	- 253
4"-16" nom. Size	Mix and Match Colors
Smith Blair	- 441, 442, 461, 462
441, 2"-16", 461 4"-12"	Flanges Color Coded, Red=I.P.S, Blue= D.I.P.S, Grey=AC

B Fittings Full Body (350 p.s.i.) D.I.P. C110

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.01 PIPE AND FITTINGS

B Fittings Full Body (350 p.s.i.) D.I.P. C110

Fittings Full Body 350 psi

Tyler / Union / Ufco 2" to 48"	- Cement lined Pipe larger than 24" rated at 250 psi
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Sigma 3" to 24"	- Cement lined Pipe larger than 24" rated at 250 psi
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Star 2" to 54"	- Cement lined Pipe larger than 24" rated at 250 psi
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Clow / McWayne 3" to 36"	- Cement lined Pipe larger than 36" rated at 250 psi
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Flanged Fittings

Clow / McWayne	- Cement lined
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Zinc Anode Caps

Mars 5/8", 3/4"	- 6oz. Weight
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Gaskets

Clow As Needed	- Nsf-61 Fluorocarbon, used for contaminated soils
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Manufactured Restraint Pipe

Clow / McWane 6" to 24" CL 56	- Super Lock boltless PSI 250 above 30" dia.fastite joints
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U.S. Pipe 4" to 24" CL56	- TR Flex boltless Above 24" rated 250 psi
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American 4" to 64" CL56	- Flex Ring Pipe boltless PSI 250 above 30" dia.fastite joints 20'
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Mechanical Joint Restraints

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.01 PIPE AND FITTINGS

B Fittings Full Body (350 p.s.i.) D.I.P. C110

Mechanical Joint Restraints

Ford	- Uni-Flange -1400 series
3" to 36"	Above 16" rated at 250 psi
Ebba Iron Inc.	- Megaflange 1100 series
3" to 48"	Above 16" rated at 250 psi,Black

Pipe Joint Lubricant

Ease-On	- no petroleum based allowed
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Ductile Iron Pipe, CL 52,53,56

Griffin	- Tyton / Fastite
3" to 24" /30" to 48"	18' or 20' lengths available
U.S Pipe	- Tyton
4" to 64"	4"- 42" in 18' lengths,16",20",24" , 48"-64" in 20' lengths
American	- Fastite
4" to 64"	20' lengths except 4" is 18' length
McWane/Clow	- Tyton / Fastite
3" to 24" /30" to 36"	3" and 4" available in 20' lengths

2.02 POLYETHELENE ENCASEMENT

polywrap for class 52 D.I.P.

Polyethylene Encasement

-

Min. 8 mil thick

2.03 PIPE INSULATION

Pipe Insulation

Foamglas Pipe Insulation

Pittsburgh Corning Corp.	- FoamGlas Pipe Insulation
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Approved Materials - Water

Manufacture Size	- Model No Comments
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2.04 PIPELINE MARKERS

Pipeline Markers

Carsonite Utility Markers

Ametek	- Carsonite Utility Markers
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2.05 STEEL ENCASEMENT PIPE

Casing Chocks (stainless steel)

Casing Chocks

Advance Products & Sys., I - SS1

As Needed	@ 10' intervals max
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Power Seal Pipeline Produc- 4810

As Needed	@ 10' intervals max
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Cascade Waterworld Mfg.. -

As Needed	@ 10' intervals max
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2.06 GATE VALVES

Gate Valves-Resilent Wedge

* See Municipal Requirements

Gate Valve Includes OS&Y

Kennedy	- KS-FW
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2" TO 12"	Assembly Bolts Stainless Steel
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American Flow Control	- 2500 D.I.P. body
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2" TO 16"	Assembly Bolts Stainless Steel
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Mueller	- 2360/ 2361
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2.5" TO 12" /14" to 36"	Assembly Bolts Stainless Steel
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2.07 TAPPING SLEEVES

B Tapping Sleeves (Flanged or MJ)

Tapping Sleeves

Mueller	- H-304SS,304MJ,H-615,T-9
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4"-36"	H-615 dip body 4"-24",T-9 30"-36"d.i.p.
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Approved Materials - Water

Manufacture Size	- Model No Comments
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2.07 TAPPING SLEEVES

B Tapping Sleeves (Flanged or MJ)

Tapping Sleeves

Power Seal	- 3480 / 3480MJ
4"-24" x 2"-24" outlet	Stainless,one piece mj outlet
JCM-	- 432
2"-12" and 4"-24"MJ	Stainless Steel 15"width min.
Rockwell/Smith Blair	- 663, 665
6"-24"with 4"- 12" outlet	Stainless Steel add mj to order
Romac Industries	- SST111,SSTM.J.
4"-30"with 12"outlet	Stainless Steel flange
American Darling	- 2800
4"-36"x 4"-24" outlet	D.I.P. Body

C Tapping Valves (Resilent Wedge) stainless bolts

Tapping Valves

American Flow Control	- 2500-1, 2500
4" to 48"	MJ or Flange,
Mueller	- 2360
4" to 24"	MJ or Flange
Kennedy	- 8950ss
4" to 12"	MJ or Flange

2.08 AIR RELEASE VALVE

2" ball valve

Air Release Valve

Ford	- FB 700
2"	Iron Pipe Thread
Mueller	- B-20285
2"	Iron Pipe Thread

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.08 *AIR RELEASE VALVE*

2" ball valve

Air Release Valve

McDonald	- 6107
2"	Iron Pipe Thread

2.09 *VALVE BOX*

Valve Boxes, Water on Top 3 Piece Screw Type

Valve Boxes

Bibby	-
ALL	
Ford	-
ALL	
Star	-
ALL	
Mueller	-
ALL	
Tyler	- 6500 series 95E-100E
ALL	
Bingham Taylor	- SIZE CC
ALL	

2.10 *METER VAULTS*

Precast Concrete Vault, Frames, Covers

Frames and Covers

Neenah	- Model R-1782 Heavy duty
East Jordan Iron Works	- 1710 Heavy duty
East Jordan Iron Works	- model 2990 Non traffic bearing

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.10 METER VAULTS

Precast Concrete Vault, Frames, Covers

Gaskets

Kor N Seal	-
as needed	

Precast Concrete Vault

McGill	-
as needed	

Mack Industries.	-
as needed	

Lindsey Concrete	-
as needed	

2.11 FLUSHING ASSEMBLIES

Flushing Assembly, Blow-off

Flushing Assembly

Kupferle	- T500
2"	Comes with own key

2.12 FIRE HYDRANTS

B Hydrants (three-way type) Repair Kits, Stortz Connection

Hydrants

American Darling	- B62-B-5
5.25" M.V.O	

Mueller-Super-Centurion	- A-423 / 423
5.25" M.V.O	

Repair Kit

American Darling	- B-62
5.25" M.V.O	

Mueller	- A-301
5.25" M.V.O	

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.12 FIRE HYDRANTS

B Hydrants (three-way type) Repair Kits, Stortz Connection

Storz Connection

Guardian	- 6600 series
local fire dept.requirements	

D Hydrant Anchoring (Swivel) Tee's and 90's

Anchoring Pipe

Clow Corp / McWayne	-
6"	

Tyler/Union	-
8"-30"x6" and 16"x8"	

Sigma	-
6"	

U.S. Pump and Foundry Co-	
6"	

American Cast Iron Pipe Co-	
6"	

Concentric Reducer

Clow, Sigma, Star, Tyler Unio -	
8" x 6"	

Hydrant Extensions

Mueller	- A-319,320
6" - 4'	Super Centurian

Kennedy	- K10 / K10B / K11
6" - 3'-6"	Guardian

Offset Grade Adjusting Fitting

Grade - Lok	-
6"x6", 6"x12", 6"x24"	350 psi.mj available

2.13 Backflow device

Approved Materials - Water

	Manufacture Size	- Model No Comments
2.13 Backflow device		
A-B	ductile iron body	
	Backflow device	
	2" and above	- AWWA Approved double check or reduced pressure
C	Heated Enclosure	
	Heated Enclosure	
	N/A	- comply with ASSE-1060
	As needed	
2.15 SERVICE CONNECTIONS		
A	Corp Stops, Curb Stops, Flare Fittings, Service Saddles	
	Corporation Stops	
	A.Y. McDonald	- 4701-B
	1" min. new const.	Ball valve
	Ford Meter Box Co.	- F600, F700, FB600,FB700
	1" min. new const.	M.I.P X FI for saddles, FB series rated 300 psi
	Mueller	- 15000, B25025, B25000
	1" min. new const.	M.I.P X FI for saddles, 25000 rated at 300 psi
	Curb Box	
	McWayne Bibby	- M-94E Arch Base
	2.5"	Screw type
	Bingham and Taylor	- P-94-E
	2.5"	Screw type
	Curb Stops	
	Ford Meter Box Co.	- B-22 series
	1" min. new const	Flare x Flare
	A. Y. McDonald	- 6100 series
	1" min. new const	Flare x Flare

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.15 SERVICE CONNECTIONS

A Corp Stops, Curb Stops, Flare Fittings, Service Saddles

Curb Stops

Mueller	- B-25204
1" min. new const	Quarter turn check only

Flare Copper 1/8 bend

A.Y. McDonald	- 4750s
As needed to match corp	Female Swivel nut x flare Nut
Ford Meter Box Co.	- LA-S series
As needed to match corp	Female Swivel nut x Flare Nut
Ford Meter Box Co.	- LA series
As needed to match corp	Female Copper thread x Flare Nut
A.Y. McDonald	- 4750
As needed to match corp	Female Copper thread x Flare Nut
Mueller	- H-15063
As needed to match corp	Female Flare thread x Flare Nut

Flare Copper Couplings

Ford Meter Box Co.	- C-28 series
1" min. new const	1/2" to 2" Available FL X M.I.P.
Ford Meter Box Co.	- C-21 series
1" min. new const	1/2" to 2" Available FL X F.I.P.

Flare Copper Quarter Bend

Ford Meter Box Co.	- L02 series
As needed to match corp	Female Copper thread x Flare Nut
Ford Meter Box Co.	- L02 S series
As needed to match corp	Female Swivel nut xFlare Nut
Mueller	- H-15068
As needed to match corp	Female Flare thread x Flare Nut

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.15 SERVICE CONNECTIONS

A Corp Stops, Curb Stops, Flare Fittings, Service Saddles

Flare Copper Quarter Bend

A.Y. McDonald	- 4776s
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As needed to match corp	Female Swivel nut x Flare Nut
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A.Y. McDonald	- 4776,
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As needed to match corp	Female Copper thread x Flare Nut
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High Density Polyethelene

Charter Plastics,Ferguson	-
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3/4" ,1"	.5"to 3" Min.psi 160 DR-11
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Red Brass Pipe

-

Inside 2" Vaults

Service Saddle

Smith - Blair	- 325
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4" to 12" nom. size	Double Strap, 3/4" to 2" outlet, corp, M.I.P. X Flare
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Mueller	- BR2B
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4" to 16" nom. size	Double Strap, 3/4" to 2" outlet, corp, M.I.P. X Flare
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Ford	- 202B
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4" to 30" nom. size	Double Strap, 3/4" to 2" outlet, corp, M.I.P. X Flare
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Type K Copper

Cerro,Reading	- K
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3/4" to 2"	Soft Copper for waterline
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Union Fitting

A. Y. McDonald	- 4758
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1" min. new const	1/2" to 2" available, 3 part
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Ford Meter Box Co.	- C22 series
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1" min. new const	1/2" to 2" available, 3 part
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Approved Materials - Water

Manufacture Size	- Model No Comments
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2.15 SERVICE CONNECTIONS

A Corp Stops, Curb Stops, Flare Fittings, Service Saddles

Union Fitting

Mueller	- H-15400
1" min. new const	1/2" to 2" available, 3 part

2.16 BEDDING AND BACKFILL

A ODOT Item 703.06 sand

Sand

Demilta,Osborne,Sidley	- ODOT item 703.06 Sand
4" below and 12" above	Natural or Manufactured sand

B Granular Backfill

57 Limestone

Demilta,Osborne,Sidley	-
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304 Crushed Limestone

Demilta,Osborne,Sidley	- 5% pass the 200 sieve
Max 2" stones	

C Control Density Fill or Low Strength Mortar

Control Density Fill

Osborne,Sidley,Cashen	-
ODOT Item 613 type 1	

2.25 METERS AND SETTINGS

Combination Domestic / Fire Meter (2" inches and above)

Master Meter

Hersey	- FM remote read
2" above	By-Pass must be Positive Displacement
Sensus	- Omni C2 and T2
2" above	

Angle Yoke Ells

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.25 METERS AND SETTINGS

Combination Domestic / Fire Meter (2" inches and above)

Angle Yoke Ells

Mueller	- H-14202
3/4",1"	Lock nut x copper flare nut
Ford	- L92 series
3/4" / 1"	Flared copper by meter yoke nose
A.Y. McDonald	- 4779Y
3/4" / 1"	Flange by Flare elbow available 4783F 1.5"

Angle Yoke Valve

Ford	- BA92 series
3/4" / 1"	
A.Y. McDonald	- 4602Y
3/4" / 1"	Flanged available 4602B 1.5"
Mueller	- H-14275
3/4",1"	Copper Flare nut x lock nut

Extension ring

Ford	- EXT Series
adapts 18",20"to 24",30"	

Flare 1/4 Bend for Corp Stop

A.Y. McDonald	- 4776,4776s
1" / 1.5"	

Frame and Cover

East jordan	- 2890
Non traffic bearing	

Meter Lid Cover

Ford	- C-32-T,C3-T,C4-T
18" to 21" dia.	

Meters

Approved Materials - Water

Manufacture Size	- Model No Comments
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2.25 METERS AND SETTINGS

Combination Domestic / Fire Meter (2" inches and above)

Meters

Sensus	- SRI
3/4" / 1"	Touch read

PVC Meter Vault

Carson / Sonoloc	-
18"min for 3/4",24" for 1"	PVC Meter Vault

Old Village / Ads hancor	-
18"min for 3/4",24" for 1"	PVC Meter Vault

Traffic Bearing Meter Vault

Mueller	- M5DS
18" x 30"	Traffic Bearing Meter Vault

Yoke

A.Y. McDonald	- 14-2,4
3/4" / 1"	

Ford	- Y-502/Y504
3/4" / 1"	Iron Yoke

Yoke Expander Nut

Ford	- EC-23,EC-4
3/4" / 1"	

Mueller	- H-14234
3/4" ,1"	3 piece with o-ring

A.Y. McDonald	- 14-2 EHG&14-4 EHG
3/4" / 1"	

2.27 CHLORINE

Calcium Hypochlorite Granules

Chlorine

Approved Materials - Water

Manufacture		- Model No
Size		Comments
2.27 CHLORINE		
Calcium Hypochlorite Granules		
Chlorine		
AWWA approved		-
Granules		65% Available Min by weight